

Date: Tuesday, 8/21/2007 2:09:55 PM
 User: Kim Johnston

Process Sheet

38

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206L FWD X-TUBE
 Job Number : 34139
 Estimate Number : 10553
 P.O. Number : N/A Part Number : D206667103BL
 This Issue : 8/21/2007 S.O. No. : N/A Drawing Number : D206-667-143 REVB
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : LANDING GEAR Drawing Revision : N/A
 Previous Run : 33157 Material : N/A
 Written By : Due Date : 9/20/2007 Qty: 1 Um: Each
 Checked & Approved By : 07.06.21
 Comment : Est Rev:F 05.09.01 Add holes for compatibility with Bell
 Skid tubes KJ/JLM

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



K.S. 07.09.05 (1)

Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D206-667-103 CHG002

07.06.23

2.0 D6002115 Crosstube material



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch
 1 D6002-115 Crosstube B25662

Check OD = 2.250"; ID = 1.750"

J.F. 07/09/23

3.0 MORI SEIKI MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA087

2-Turn first side as per Folio FA087

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-143.

J.F. 07/09/23

4.0 QC1 INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

J.F. 07/09/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 07/10/11
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07.10.11	13	EXTRA SET OF HOLES DRILLED IN CUFF, FOR ATTACHING BHT SADDLES. 3 HOLES DRILLED INSTEAD OF 2	CP 07.10.11 per QSI 642	ACCEPTABLE. INSTALL HARDWARE AS NORMAL. NEED DSI FOR THIS XTUBE. ENG TO PROVIDE DSI	M/g 07/10/11 per QSI 642	C 07/10/11 per QSI 642	CP 07.10.11 per QSI 642	C 07/10/11 per QSI 642
				See Back of Page #13				

NOTE: Date & initial all entries

Date: Tuesday, 8/21/2007 2:09:55 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34139

Part Number: D206667103BL

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA087

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-143.

3-Remove sand and plugs

4-Scribe part # and batch # using vibrating stylus as per Dwg D206-667-143
Inside of Cuff(Donot engrave on outside of tube)

J.F.
07/09/23

6.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

J.F. 07/09/23

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.F. 07/09/23

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Polish entire outside surface of crosstube

JB 7-9-27

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Er 07/09/27

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SR 7-9-28

11.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

Bend tube as per Dwg D206-667-143 using CNC bender program 206L-fw and Folio FT017

EZ 7-10-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 8/21/2007 2:09:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34139

Part Number: D206667103BL

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC15

DIMENSIONAL CHECK OF X-TUBES



Comment: DIMENSIONAL CHECK OF X-TUBES

Er 07/10/10

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes in tube using drill Jig DT8541 & DT8542 as per Dwg D206-667-143. Drill all (3) top holes

2-Drill and Ream all holes in tube to finish size using drill Jig DT8541 & DT8542 as per Dwg D206-667-143 Check dimensions between holes on all four sides.

3-Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins.

4-Drill pilot holes using drill Jig DT8541 & DT8542 as per Dwg D206-667-143. Drill only the top (2) holes.

5-Drill & ream the top (2) holes to finish size using drill Jig DT8541 & DT8542 as per Dwg D206-667-143

6-Drill Fwd rivet holes using drill Jig DT8787FWD as per Dwg D206-667-143. Note: Fwd side has 3x top holes.

7-Drill Aft rivet holes using drill Jig DT8787AFT as per Dwg D206-667-143.

8-C'sink holes as per Dwg D206-667-143. Allow rivet to sit below surface to compensate for paint.

9-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-143

Er
7-10-11

PTO

POSITIVE
RECALL

JB 7-10-15

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

JB 7-10-15

15.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Er 07/10/10

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Er 07/10/10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07-10-11	13.0	extra rivet hole was drilled on the Aft of the cuff. R;C: Human error.	QS/012	drill all holes on the cuffs, and add to OSI continue to step 29.0 on positive Recall	EL 7-11-22	RS 07-11-22	QS/012	07-10-11

NOTE: Date & initial all entries

Date: Tuesday, 8/21/2007 2:09:56 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34139

Part Number: D206667103BL

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

OUTSIDE SERV.10

OUTSIDE SERVICES -LG



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038Or

Issue P/O: 4852 LPI as per ASTM 1417

Level 2 Attach copy of NDT results to work order

02071101190

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage

Ensure copy of NDT results attached to work order.

02/10/19 (1)

19.0

QC6

DIMENSIONAL CHECK



Comment: Inspect for damage & ensure results are as per Dwg D206-667-103

02/10/19

20.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube DELFLEET BLUE

3-CLEAR WITH DELFLEET

ISSUE P.O TO ATELIER DEBOSSSELAGE

RT 07-10-20

RT 07-10-22

PTC (1)

21.0

QC14

INSPECT SPRAY PAINT



ml 07 10 23



Comment: Inspect Spray Paint

Wrap in plastic bag to protect from scratches

22.0

D2856400

Abrasion Strip



Comment: Qty.: 1.2138 f(s)/Unit Total : 1.2138 f(s)

Pick:

Qty Part number Description Batch

2 D2856-400(Cut to 6.94") Abrasion Strip 34293

ml 07 10 28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07.10.23	20.0	Paint was light on top side, Primer showing through. RC8 Human error, employee did not put enough paint	<i>[Signature]</i> QS/012	Sand and re-paint de Fleet blue	25 07-10-26	<i>[Signature]</i> 14-10-30	<i>[Signature]</i> QS/012	<i>[Signature]</i> 14-10-24

te & initial all entries

Date: Tuesday, 8/21/2007 2:09:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34139

Part Number: D206667103BL

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

D2873043

Nut Plate Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2873-043

Nut Plate

33422

RT

07-10-20

24.0

D2873045

Nut Plate Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2873-045

Nut Plate

33692

RT

07-10-20

25.0

D28911

Support 2.25 dia



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2891-1

Support

34141

ml

07 10 28



26.0

MS20601AD4W8

RIVET



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part number Description Batch

14 MS20601AD4W8 Rivet

105057

RT 07-10-20

27.0

MS2192020

Clamp (per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-20

Clamp

104423

ml

07 10 28

28.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Install abrasion strips as per QSI 035 using DT8579. .Note: (2) Aft holes should be facing up.

ml

07 10 28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 8/21/2007 2:09:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34139

Part Number: D206667103BL

Job Number:



Seq. #:

Machine Or Operation:

Description :

2-Install supports and clamps as per Dwg D4206-667-143. Torque clamps to 80-100 in lb

mt 071028

3-Install nut plates as per Dwg D206-667-143. Touch-up rivet heads with Imron paint.

25 071020

29.0

QC5

INSPECT WORK TO CURRENT STEP



received OSI
for holes -> 071122



SEE PTO 2130



Comment: INSPECT WORK TO CURRENT STEP

30.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

31.0

AN532A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch:

M104936

AS 071122 (X1)

32.0

MS21042L5

Nut



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Nut

Batch:

M105430

AS 071122 (X1)

33.0

AN57A

Bolt



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:Packing Kit

Qty Part number

Description Batch

10 AN5-7A

Bolt

M105426(x3) M105433(x3)

AS 071122 (X1)

34.0

AN530A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:Packing Kit

Qty Part number

Description Batch

4 AN5-30A

Bolt

M103641

AS 071122 (X1)

W571128

POSITIVE RECALL

EFFECTIVE 07-10-11 AUTH

RELEASED DATE

071121

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: AD Date: 21/4/26
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 8/21/2007 2:09:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34139

Part Number: D206667103BL

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

AN960JD516

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Pick:Packing Kit

Qty Part number Description Batch

18 AN960JD516 Washer M104156

KS

07/11/22

(X1)

36.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

07/14/23

(X)

37.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-667-103

Location:

PPP Rev:

B

NEED

POSITIVE RESULT

EFFECTIVE 07.10.11 AUTH

RELEASED 7/11/23 DATE 07/11/23

DSI 7/11/23 SD IX

38.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/11/26

Job Completion



U 07/11/26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 34139
Description: Crosstube Assembly (206L High Fwd)	Part Number: D206-667-143
Inspection Dwg: D206-667-143 Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

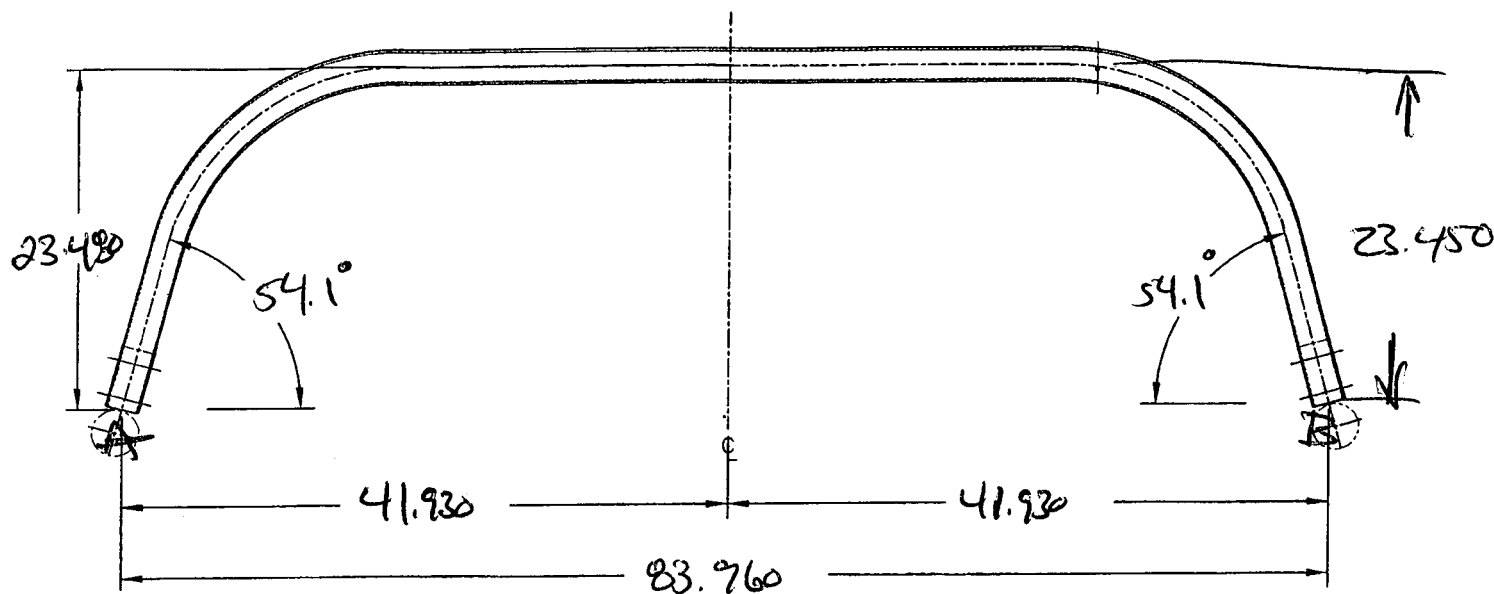
Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.240	+0.005/-0.000	2.244"	✓			
	1.982	+0.005/-0.000	1.986"	✓			
	2.019	+0.005/-0.000	2.023"	✓			
	2.058	+0.005/-0.000	2.062"	✓			
	2.097	+0.005/-0.000	2.101"	✓			
	2.136	+0.005/-0.000	2.139"	✓			
	2.176	+0.005/-0.000	2.180"	✓			
	2.201	+0.005/-0.000	2.205"	✓			
	0.125	+/-0.010	.118"	✓			
	0.400 x 30°	+/-0.010	.400 x 30°	✓			
	R0.063	+/-0.010	R.063"	✓			
	R0.500	+/-0.010	R.500"	✓			
	4.438	+/-0.030	4.446"	✓			
SIDE B	104.98	+/-0.020	104.995"	✓			
	2.240	+0.005/-0.000	2.244"	✓			
	1.982	+0.005/-0.000	1.986"	✓			
	2.019	+0.005/-0.000	2.024"	✓			
	2.058	+0.005/-0.000	2.063"	✓			
	2.097	+0.005/-0.000	2.101"	✓			
	2.136	+0.005/-0.000	2.140"	✓			
	2.176	+0.005/-0.000	2.180"	✓			
	2.201	+0.005/-0.000	2.205"	✓			
	0.125	+/-0.010	.118"	✓			
	0.400 x 30°	+/-0.010	.400 x 30°	✓			
	R0.063	+/-0.010	R.063"	✓			
	R0.500	+/-0.010	R.0.500"	✓			
	4.438	+/-0.030	4.443"	✓			

Measured by: J.F.	Audited by: J.F.	Prototype Approval:	N/A
Date: 07/09/23	Date: 07/09/23	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.05.06	New Issue (P/O D206-667-103)	KJ/RF	
B	06.03.09	Dwg Rev updated	KJ/JLM	

DART AEROSPACE LTD		Work Order:	34139
Description: Crosstube High Fwd (206L)		Part Number:	D206-667-103
Inspection Dwg: D206-667-143 Rev: B		Page 1 of 1	

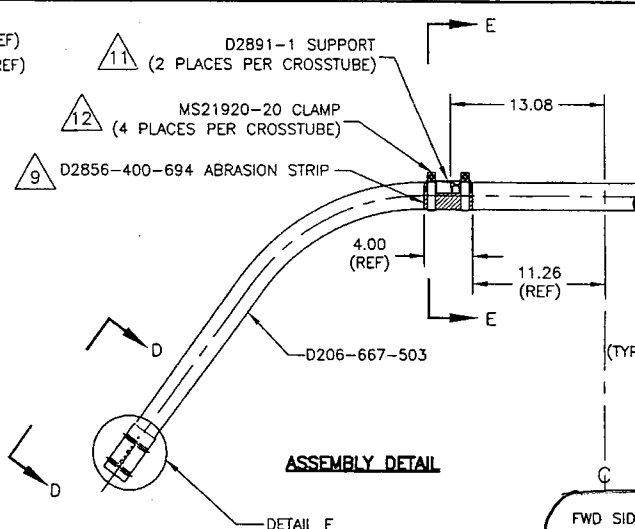
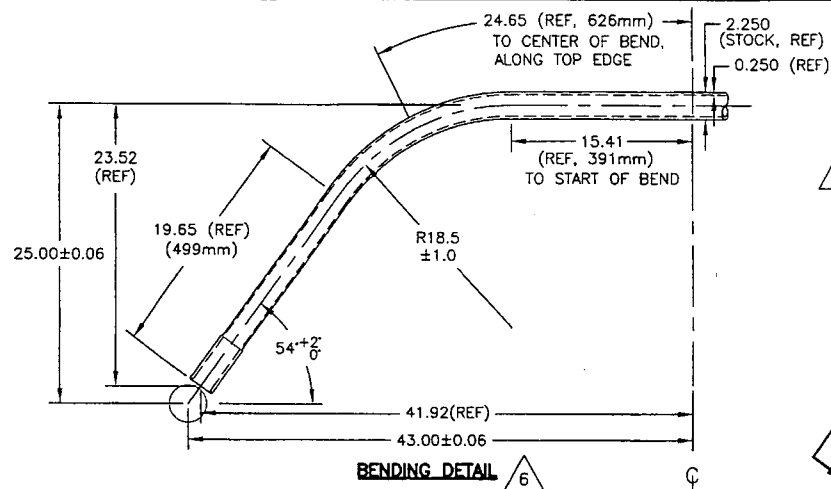
Required Dimension	Min	Max
Height	23.46	23.58
1/2 Span	41.86	41.98
Angle	54	56
Total Span	83.72	83.96



Comments
Height is 44 by 0.030" from side

QC15 Inspection	Cr
Date	02/10/10

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	[Signature]



Ø0.323^{+0.005}_{-0.000}
(TYP 5 PLACES PER CUFF)
HOLE TO BE ALIGNED WITHIN ±0.001
OF HOLE ON OTHER SIDE OF CUFF

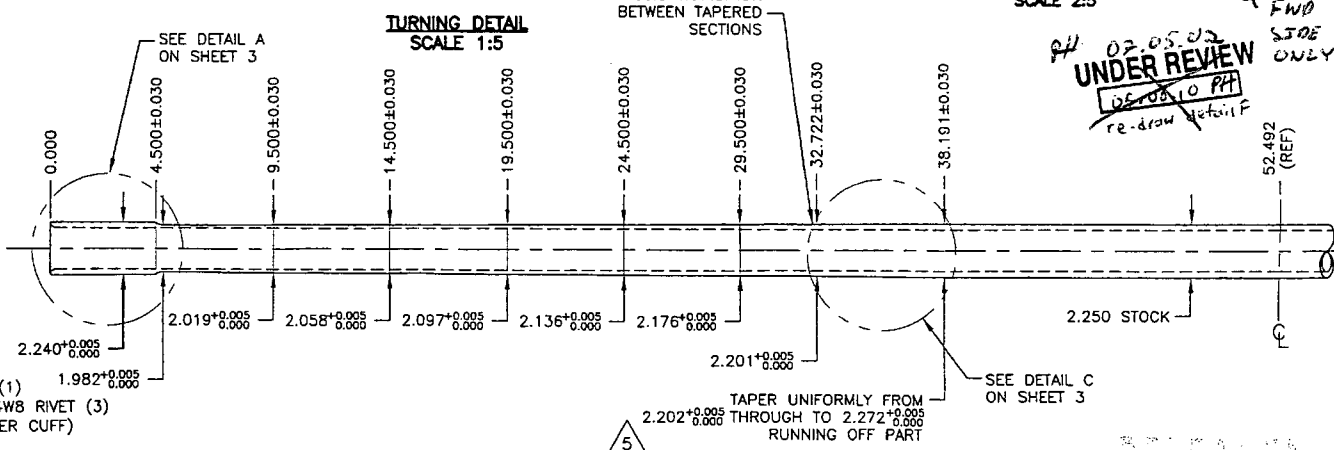
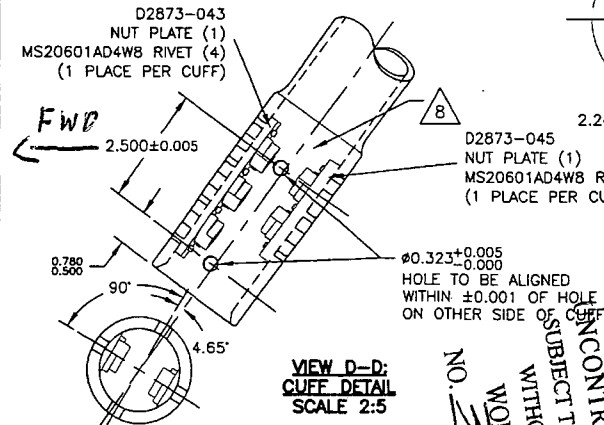
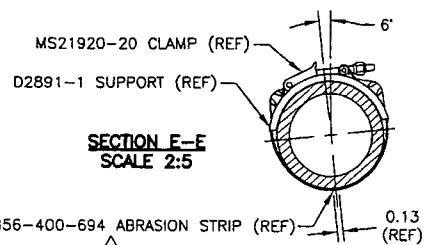
PILOT Ø0.128
C'SINK Ø0.225X100"
(TYP 7 PLACES PER CUFF)

FWD SIDE ONLY

DETAIL F
SCALE 2:5

PH 02.05.02
UNDER REVIEW
05.08.10 PH
re-draw Detail F

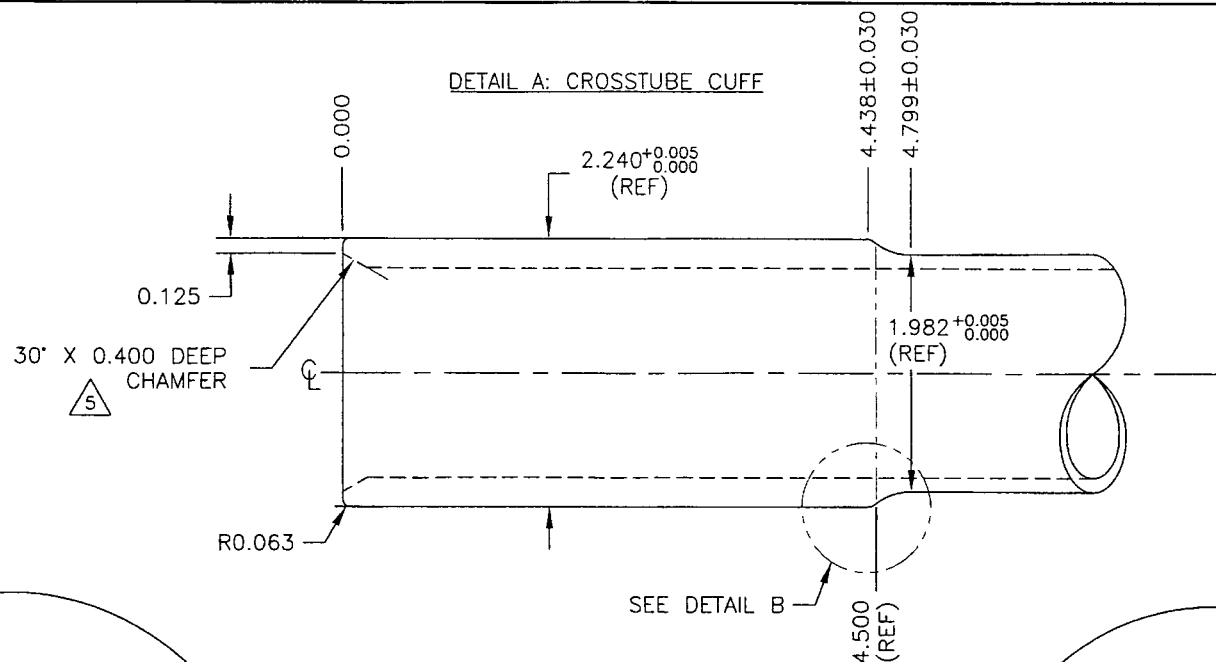
FWD
SIDE
ONLY



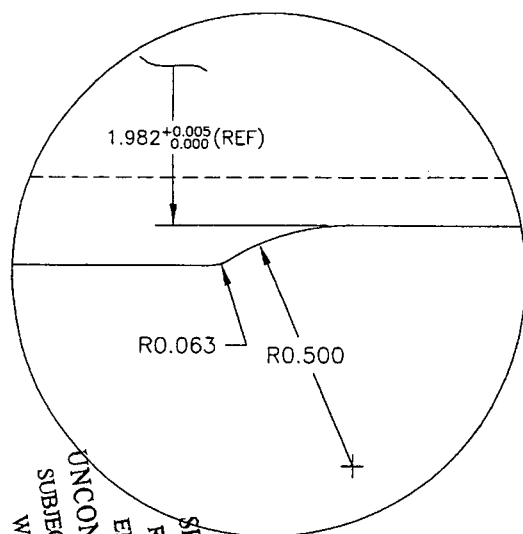
COPYRIGHT © 2000 BY DART AEROSPACE LTD.		DESIGN	DRAWN BY	DART DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA	REV. B
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		PH	PH		
		CHECKED	APPROVED	DRAWING NO.	SHEET 2 OF 3
		4 OS	4 OS	D206-667-143	
		DATE		TITLE	SCALE
		05.07.26		CROSSTUBE ASS'Y (206L HIGH FWD)	1:10

NO. 34139
WORK ORDER
SUBJECT TO AMENDMENT
WITHOUT NOTICE
ENGINEERING
RETURN TO
SHOP COPY

RELEASED
05.07.26

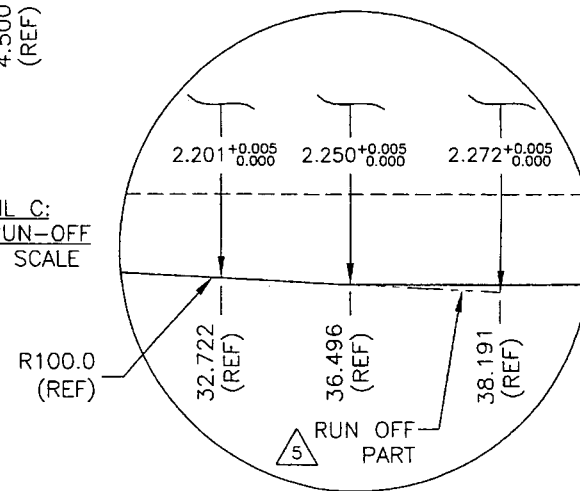


UNDER REVIEW
 06.07.02 PH
 re-draw detail 12
 PH 07.05.02



DETAIL B: CUFF
 TRANSITION
 SCALE 4:1

DETAIL C:
 TAPER RUN-OFF
 NOT TO SCALE



NO. 34139
 WORK ORDER
 WITHOUT NOTICE
 UNCONTROLLED COPY
 ENGINEERING
 RETURN TO
 SHOP COPY

COPYRIGHT © 2000 BY DART AEROSPACE LTD.		DESIGN PH	DRAWN BY PH	DART	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED HDS	APPROVED HDS	DRAWING NO. D206-667-143	REV. B SHEET 3 OF 3
DATE 05.07.26		TITLE CROSSTUBE ASS'Y (206L HIGH FWD)		SCALE 1:1	



LIQUID PENETRANT TEST REPORT

P- 08665

PAGE 1 OF 1

CLIENT: Dart Aerospace
ATTENTION: Bill Beckett
ADDRESS: 1270 Aberdeen Street
Hawkesbury Ontario K6A 1K7
DATE: October 19, 2007
ACUREN JOB NO.: 187-07-01157
POW/NO.:
WORK LOCATION: as shown
ACCEPTANCE STD.: E1417-99
REV./DATE: 99

PROJECT: Cross Tube Inspection
ITEM(S) EXAMINED: Inspection of X-tube assemblies, 212/205 high Fed, 212/205 High AFT, 206L FWD, 412 High AFT, 212/205 high Fed, as listed Below

OB DESCRIPTION: PROCEDURE NO. LT-0002 REV./DATE: E1417-99 TECHNIQUE NO. LT-0002 REV./DATE:
PART NO.: X-Tube assemblies as listed. MATERIAL: 7075 Aluminum THICKNESS: < 1/2"
SCOPE: 100% examination of all outer surfaces per standard ASTM E1417-99
Type I, Method A, Level 2.

TEST DETAILS

METHOD: ☒ FLUORESCENT ☐ VISIBLE ☒ WATER WASH ☐ SOLVENT REMOVABLE ☐ POST EMULSIFIED
FAMILY BRAND: Magnaflux Batch # 07F046 BLACK LIGHT S/N: 8168 ☒ OUTPUT > 1000 μ W/cm² ☒ AMBIENT < 2 fc
PENETRANT: Zyglo ZL67 MINIMUM DWELL TIME: 10 MIN. LIGHTING EQUIP.: ☐ FLASHLIGHT ☐ TROUBLELIGHT ☐ OUTPUT > 100 fc @ SURFACE
PENETRANT REMOVER: Water MINIMUM DRY TIME: > 10 MIN. OTHER:
DEVELOPER: NA MINIMUM DWELL TIME: 10 MIN. LIGHT METER S/N: 1098266 CAL DUE DATE: 8/9/13
DEVELOPER TYPE: ☐ NON AQUEOUS ☐ AQUEOUS ☐ DRY

TEST SURFACE

SURFACE CONDITION: ☐ AS GROUND ☐ AS WELDED ☐ MACHINED ☐ SHOT BLASTED ☒ CLEAN BARE METAL
SURFACE TEMPERATURE: ☐ < - 4°C/ 20°F ☐ - 4°C/ 20°F TO 10°C/50°F ☒ 10°C/50°F TO 52°C/125°F ☐ > 52°C/125°F

RESULTS- (☐ METRIC ☒ IMPERIAL)

ITEM	COMMENTS	ACCEPT	REJECT
P.N. D212664100 x 1 piece			
Job # 34929			
P.N. D212664201 x 1 piece			
Job # 30420			
P.N. D206667103 x 2 pieces			
Job #'s 34926 and 34139			
P.N. D412664203 x 1 piece			
Job # 33537			
P.N. D212664101 x 2 pieces			
Job #'s 34931 and 34930			
All Seven (7) Units Acceptable.			

Scope of Services

The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care

In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES

CLIENT REPRESENTATIVE: *Matthew Woodcock* DTR # 187-07-01157
TECHNICIAN (SIGNATURE): *Mark Westover*
NAME (PRINT): Mark Westover
CGSB LEVEL: 2 SNT LEVEL: 2
CGSB REG. NO.: 5323
REPORT REVIEWED BY:
NAME: INITIALS:
1ST TECHNICIAN 2ND TECHNICIAN
CGSB LEVEL: SNT LEVEL:
CGSB REG. NO.: